

# **Self-organizing as Source of the Civil Society's Transformational Dynamism in context of emerging Anthropocene**

## **Abstract**

The paper analyses transformational dynamics of self-organizing communities as sample cases of civil society organizations serving as drivers of sustainable value creation in an emergent regenerative (alternate) economy. The explored causal loop and stock and flow diagrams can facilitate to clarify variables, related data characteristics and potential sources as well as their interplay. A recursive analytic logic enables to use initial phases of model building to facilitate fine-tuning the analytic tasks and tools. It can help to quantify and measure variables, as well as relevant data and their sources. The effects of time distribution should be considered and the relevance of metamodeling checked in order to analyze social changes interplaying with the civil society organizations' dynamics characteristic that generate their transformational capacities.

## **Introductions**

The current paper uses modelling and simulation to analyze sources and mechanisms of civil society entities' social transformational potential. The "third sector" gains enhanced importance in context of emerging Anthropocene what is not often enough dealt with. In a period when the limits to growth appear already as a tough natural boundary the society greatly needs a function system that is capable to ensure "...the provision of stability for joint collective action for something greater than just individual benefits...for the common good and social coherence ...to solve...[also wicked] problems that are not solved by any other part of society"(Reichel, 2012:58-60). A significant part of the academicians also continues to perceive civil society as diffuse and resource-less, something 'in between' of everything. They fail to recognize its clear and necessary locus and function a in society (Reichel, 2012:58-60).

The civil society operates as a major, in fact the ultimate, source of social capital, i.e. any pattern of an "...informal norm that promotes cooperation between two or more individuals... [Such norm] must be instantiated in an actual human relationship" (Fukuyama, 1999). Its capacity of continuous self-organizing is enabled by and also generates social capital, and their interplay operates as crucial ingredient of the modern Western societies. "...a democracy ...maintains a protected sphere of individual liberty where the state is constrained from interfering. If such a political system is not to degenerate into anarchy, the society that subsists in that protected sphere must be capable of organizing itself. Civil

society serves to balance the power of the state and to protect individuals from the state's power”(Fukuyama, 1999). Moreover, in a crisis due to their self-organizing capacity the civil society players can actively amend and even substitute both market and public players. A global self-organizing network was capable to promptly react on the COVID, co-create and deliver 3D printed face shields for the medical staff and components, including even valves for ventilators (Behir, 2020). Despite such clearly visible examples the efforts aiming measuring volunteer work, the significant value it creates, bring at the best a partial success. The national accounts’ relevant methodology co-created through systematic efforts of the UN and OECD (2003), the EU (2006) and the ILO (2011) are rather unevenly implemented in national statistics.

However, the civil society organizations have multifaceted importance as the related literature points out since they are:

- (i) growingly powerful actors shaping public opinion by functioning simultaneously as communication channels and amplifiers, capable to give voice to individual and collective opinions and efforts; (Hirschman, 1970; Naidoo and Tandon, 1999; Castells, 2009);
- (ii) tools facilitating to improve life quality through empowering individual and collective efforts (Morris, 1979; Saxon-Harrold and Carter, 1987; Hazell and Whybrew, 1993);
- (iii) channels to participate in political and socio-economic (change) processes (Anheier, 2004);
- (iv.) domains of volunteer collaboration facilitating to overcome mass-estrangement pressures and tendencies (Rifkin, 2011; Reichel, 2012; Farrell and Shalizi, 2012);
- (v) a growingly important economic player, creating increasing volumes and share of value, income, and employment (Anheier, 2004; Stillman, 2006; Rifkin, 2011; Mook et al., 2015); and
- (vi) a key source of social capital enabling smooth functioning of market economy and representative democracies (Fukuyama, 1999; Salamon et al. 2003; Rifkin, 2011; Reichel, 2012).

### **Social capital, trust and cooperation**

Social capital and trust (Fukuyama, 1999) inevitable for normal operation of all clusters of the society are generated by the civil society. If and when the “...markets or governments destroy the social trust vested in them, people will eventually withdraw their support or force a reorganization of the other two sectors”(Rifkin, 2011:266). Despite it the general and research interest toward the civil society remain rather low (Anheier, 2004). Such (relative) disinterest can be connected also to methodological challenges and insufficiencies. Similar research requires to analyze multiple non-linear phenomena, understand robust feed

backing dynamisms and tackle the frequent lack of clear and broadly accepted definition, reliable empirical and statistical data. Moreover, even to measure and quantify them are difficult tasks. However, despite similar challenges their growing practical significance urges to find proper methods of the civil initiatives' and the related change mechanisms' in depth study. To (re-)generate social capital and trust has growing significance. It requires a more thorough analysis of the interplay among the civil society, its organizations and their transformational dynamism has fundamental and growing importance - the paper argues.

The civil society organizations' modelling and simulation can shed light also on the sources and mechanisms of their transformational dynamism. The System Dynamics may serve as sophisticated and effective tools facilitating to consider and explore the underlying multidirectional and multidimensional causal interplay. This paper aims to extend and upgrade the outcome of a research of self-organizing communities (Veress, 2016) their delayed interactions bringing about feed backing effects dispersed in space-time. The analysis explored five clusters of 21 Finnish and Hungarian case-communities. It deployed in frame of concept creation methodological pluralism (Van de Ven and Poole, 2005) and relied primarily on qualitative methods. The importance of quantification is growing, however, its operationalization, and even accessing relevant data remains challenging. Therefore, in multiple ways may be useful a recursive mapping of the causal loops and the feedbacks among levels and rates. Beside quantifying and measuring relevant variables, specifying requirements and even potential sources of relevant data it may also facilitate to identify ways and tools.

Consequently, the very modelling efforts simultaneously may facilitate besides fine-tuning analytic tasks and tools also to identify and access relevant data (sources). The recursive analytic patterns can enable following an inverse logic and enhance also the effectiveness. The various causal and stock and flow diagrams may serve as useful intermediary tools. The understanding of these diagrams can facilitate to construct and run quantitative model(s) of the civil society organizations shedding light also on their transformational dynamism and broader social effects.

The communities - perceived as representatives of broad array of civil society organizations - are adaptive enough. The exploration of why and how these can become adaptive can capitalize on the System Dynamics' recursive, multi-staged deployment. It can help to examine whether they are capable to carry out their multiple and multi-colored tasks in a context characterized by feed backing changes that unfold with accelerating speed. Thus it facilitates to explore simultaneously two phenomena. (i) The civil society players' ability to effectively fulfil and altering various needs in context of rapidly changing social dynamics. Similarly, (ii) the role of these civil entities in simultaneously affecting and

shaping the social dynamics. Consequently, the proposed approach requests and enables to generate metamodel(s).

**Motivating self-communication in communities**

The communities’ members’ voluntary cooperative interactions facilitate improving their perceived life quality in multiple ways. They are ready to volunteer what feeds back with their self-communication. It “...multiplies and diversifies the entry points in the communication process. This gives rise to unprecedented autonomy for communicative subjects to communicate at large” – (Castells 2009:135). The self-communication facilitates recognizing reciprocal benefits from collaboration. The awareness of an associational - instead of competitive - advantage in turn enhances the motivation to intensify contributions to cooperative efforts. The co-operative interactions’ increasing rates and self-organizing aggregation generates perceived life-quality improvements. Sine these phenomena are mutually catalytic they facilitate and amplify feedbacks aggregating into self-reinforcing loops (Figure 1).

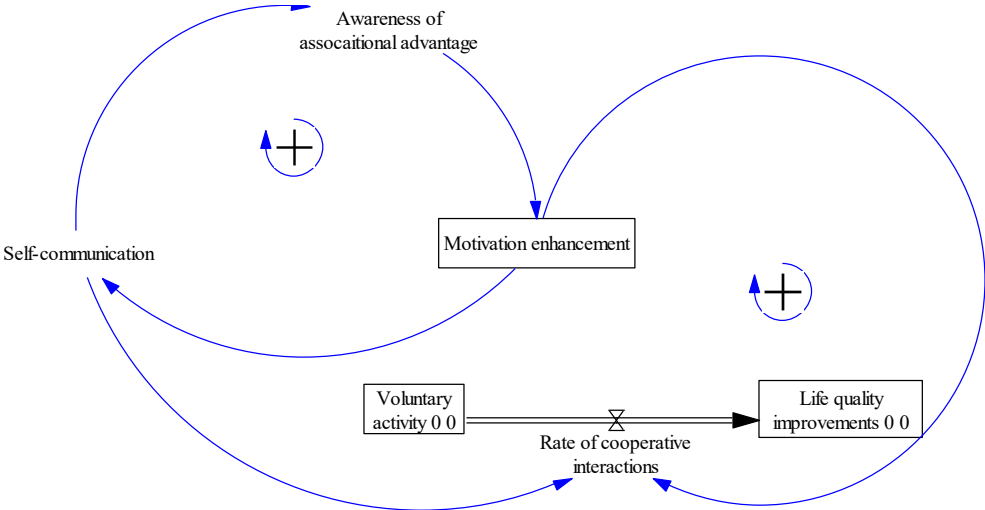


Figure 1: Enhancement of the motivation to voluntary activities

**Social capital and trust (re-)creation**

The community members carry out their sense and meaning making through intertwined intra- end interpersonal dialogues (Stacey, 2010). The volunteers’ dialogues enact various institutional settings and aggregate into their self-communication. The association-prone institutional settings’ enactment simultaneously carries out the community members’ meaning and decision making by re-enforcing and amplifying their motivation to join and contribute to cooperative interactions. The community members’ communicative interactions



amplify mutual trust among the community members. Due to their association-prone character the institutional settings create and affect simultaneously the mutual trust by acting as social capital. They operate as organizing platform: actively enable and catalyze the community self-organizing. The “strength “of the association-prone character of characteristics of the institutional settings play also significant regulatory role, they catalyze multi-dimensional feed backing changes and their patterned aggregation.

These interplaying processes are generative and constitutive of a dynamic constellation enabling, facilitating, regulating and shaping the emerging patterns of process feedbacks. These feed backing processes are constitutive of the community members’ cooperative relational dynamism. This setup provides the first instant dynamic character of communities (Figure 2).

### The resource enactment’s growing effectiveness

The volunteering community members’ interactions contribute to their collective efforts. The communities often consciously limit the particular tasks generating the “modularity of contributions” (Benkler, 2011) allowing minimize the particular tasks’ resource intensity.

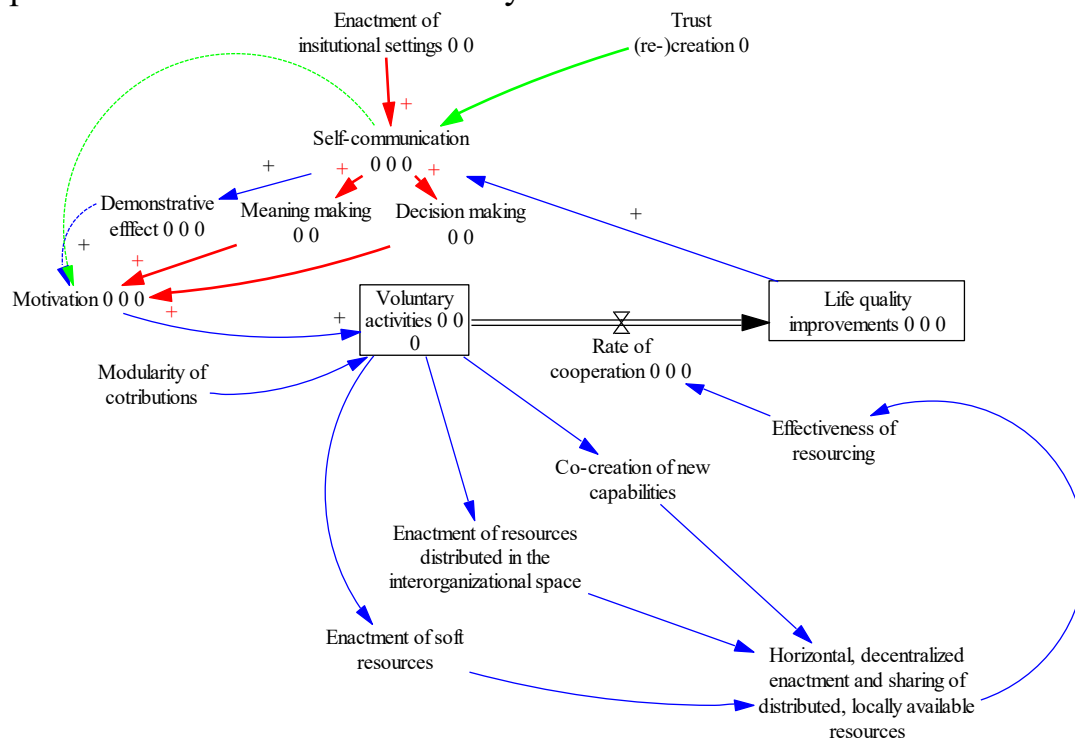


Figure 3: Enhanced effectiveness of resourcing

The volunteers - due to the tasks' limited size – often are ready and willing to take care also about the necessary resources (Figure 3). The voluntary interactions simultaneously carry out also the resources' identification, accession and mobilization, i.e. enactment (Orlikowski, 1992, 2000). The resourcing therefore often is a component of the participants' voluntary interactions and contributions. Consequently, in the communities following a logic of cooperation try to decrease both the individual tasks and their resource intensity. Decreasing the burden connected with a particular duty helps to increase the number of volunteering contributors. Since the tasks' resource intensity is rather low many individual is ready to participate and mobilize due, limited resources.

The modularity of contributions approach by consciously limiting the particular tasks' size and resource intensity with high probability may increase both the frequency and overall number of contributions. By limiting and decreasing resource requirements in line with modularity of contributions approach may extend the overall volume of mobilized resources. I.e. somewhat paradoxically by limiting the particular tasks' resourcing requirements may facilitate to extend the resource base - and it may also facilitate to improve the effectiveness of resourcing. The cooperating volunteers may enact through their networking personal contacts mobilize also resources located in the “inter-organizational space”. These are dispersed into very small quantities, but the sum is rather significant.

The community members' symbiotic capability co-creation and the improving effectiveness of collective resourcing may unleash a “cooperation trap” (Csányi, 1989). Feed backs among improved effectiveness of resourcing, growing awareness of increasing associational advantage, and strengthening motivation to cooperate may catalyze a strengthening collaboration. The improved effectiveness of resourcing feeds the capability to innovate and brings about enhanced functional -rather than organizational-complexity. This pattern may operate as driver(s) of emerging, self-organizing evolutionary tendencies (Nowak, 2006).

The community members' knowledge, information, creativity, and psychological energies operate as ‘soft resources’ which are non-depletable and non-rivalrous (Bollier, 2007:28) therefore multipliable and self-multiplying. These are freely sharable and its pieces can be recombined as knowledge plausibly demonstrates. Through their implementation become more ‘voluminous’ and of higher quality instead of decreasing and becoming ‘worn out’. They often serve as ‘ultimate substitute’ that enables decrease or fully replace other resources. Moreover, in the communities resourcing often has horizontal and decentralized patterns replacing

accumulation and redistribution through vertical hierarchies by turning obsolete to establish and maintain ownership by replacing it with sharing.

The distributed, locally available resources horizontal and decentralized enactment and sharing provides multiple ways improving the effectiveness of collective resourcing - to expand and upgrade the resource base. Such enhanced effectiveness of collaborative resourcing can improve life quality through multiple ways (Figure 3),

## Quantitative modelling of community dynamism

The various causal loops and stock and flow diagrams visualize sources, mechanisms and effects of the communities' transformational dynamism, help identify patterned process feedbacks. (Figure 4).

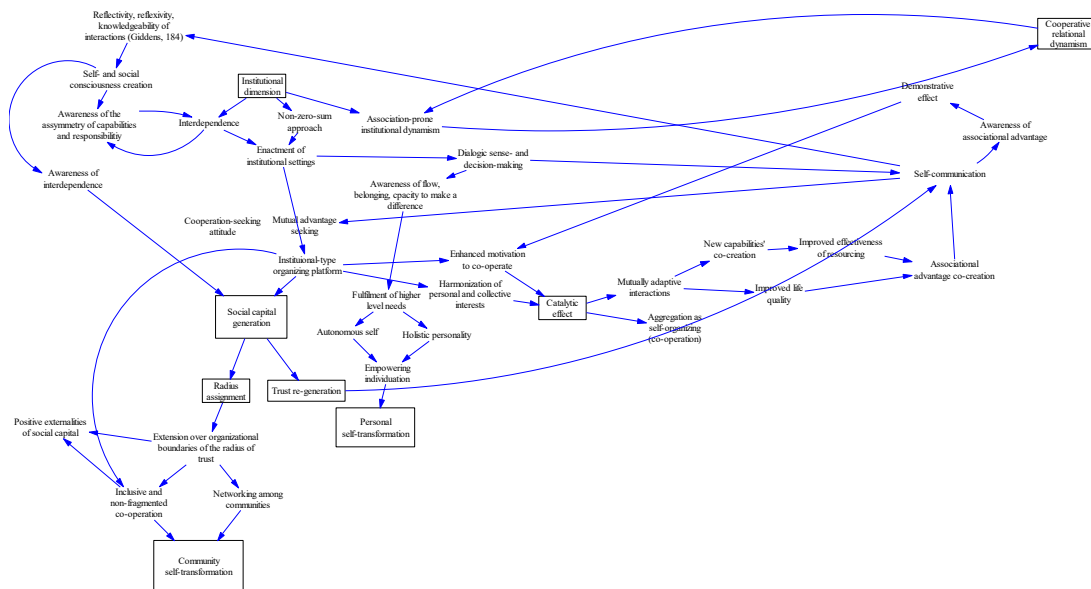


Figure 4: Dynamic modules of the self-organizing communities' transformational dynamism

The motivation to participate and contribute drives and capitalizes on self-communication. The recursive scrutiny of the feedback loops facilitates to identify variables similar to life quality changes, rate of cooperative interactions, trust or social capital. It facilitates to identify ways of quantification and measuring of these variables



## Conclusions and Questions for Further Research

Concepts like civil society, volunteering, social capital are rather elusive what makes more challenging their measurement and quantification. The availability of data, their non-homogenous character, the lack of reliable sources turn model building into “challenging exercise”. Open data, log analysis, accession of survey and poll results and other “less traditional” solutions and sources can facilitate finding solutions. These tools may facilitate capitalizing on System Dynamics, its analytic potential while exploring the social changes’ emergent dynamics. Probably analyzing effects of time distribution and capitalize on metamodels are also worth considering.

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